

What is claimed is:

1           1. A circuit board assembly comprising:  
2           a main board having a first face and a second face and terminating in an edge having a  
3           mounting area, the mounting area comprising at least one mounting pad on at least one of the  
4           first and the second faces;  
5           a connector board having a first face and a second face and comprising at least one  
6           through hole between the first and second faces; and  
7           at least one connector pin disposed in the at least one through hole and having a portion  
8           extending beyond each of the first and second faces of the connector board, wherein the edge  
9           of the main board and the second face of the connector board are abutted and the portion of the  
10          connector pin extending beyond the second face of the connector board is attached to the at  
11          least one mounting pad.

1           2. The circuit board assembly according to claim 1 wherein the at least one connector  
2           pin further comprises a flange disposed circumferentially and located along the length of the  
3           pin that seats against the first side of the connector board.

1           3. The circuit board assembly according to claim 1 wherein the at least one mounting  
2           pad is a plurality of electrical contact pads located on one of the first side of the connector  
3           board, the second side of the connector board, or combinations thereof.

1           4. The circuit board assembly according to claim 3 wherein the at least one hole in the  
2           connector board is a plurality of holes and the at least one pin is a plurality of corresponding  
3           connector pins inserted in the plurality of holes.

1           5. The circuit board assembly according to claim 4 wherein the plurality of pins  
2 further comprise flanges disposed circumferentially and located along the length of the pins  
3 that seat against the first side of the connector board.

1           6. The circuit board assembly according to claim 4 wherein the plurality of connector  
2 pins include at least one row of pins aligned with and attached to the plurality of electrical  
3 contact pads on edge of the main board.

1           7. The circuit board assembly according to claim 6 wherein the portion of at least one  
2 row of pins extending beyond the second face of the connector board are attached to their  
3 corresponding electrical contact pads of the main board by a solder connection.

1           8. The circuit board assembly according to claim 1 wherein the edge of the main  
2 board adjacent the mounting area includes a slot with adjacent tab portions to receive the  
3 second face of the connector board.

1           9. The circuit board assembly according to claim 8 wherein the connector board  
2 comprises slots for receiving the tab portions of the main board.

1           10. The circuit board assembly according to claim 1 wherein the pins further comprise  
2 flanges disposed circumferentially and located along the length of the pins that seat against the  
3 first side of the connector board.

1           11. The circuit board assembly according to claim 1 wherein the main board is a  
2 printed circuit board having traces connecting at least one of the electrical contact pads to at  
3 least one electrical component located on the printed circuit board.

1           12. The circuit board assembly according to claim 1 wherein the connector board is a  
2 printed circuit board with traces that electrically connect the connecting pins.

1           13. A printed circuit board having at least one electrical component, the circuit board  
2 comprising:

3           a first face and a second face and terminating in an edge having a mounting area, the  
4 mounting area configured for receiving a connector board and comprising at least one  
5 mounting pad on at least one of the first and the second faces.

1           14. The printed circuit board assembly according to claim 13, wherein the edge of the  
2 main board adjacent the mounting area includes a slot with adjacent tab portions for receiving  
3 a connector board.

1           15. The printed circuit board assembly according to claim 13, wherein the at least one  
2 mounting pad is a plurality of electrical contact pads located on one of the first side of the  
3 connector board, the second side of the connector board, or combinations thereof.

1           16. The printed circuit board assembly according to claim 13, wherein the printed  
2 circuit board comprises traces connecting at least one of the electrical contact pads to at least  
3 one electrical component located on the printed circuit board.

1           17. A connector board for connecting a plurality of connector pins to a printed circuit  
2 board, comprising:  
3           a first face and a second face and a thickness having slots for receiving a main printed  
4 circuit board and at least one through hole between the first and second faces configured to  
5 receive a plurality of connector pins.

1           18. The connector board according to claim 17, wherein at least some of the plurality  
2 of holes are aligned in two rows between which the slots for receiving a main printed circuit  
3 board are located.

1           19. The connector board according to claim 17, wherein the each of the plurality of  
2 holes located in the connector board comprises bonding rings plated around their periphery on  
3 one side of the connector board.

1           20. The connector board according to claim 17, wherein the connector board is a  
2 printed circuit board with traces that electrically connect the bonding rings.